

Appl. No. 10/019,030
Atty. Docket No. AA411M
Amdt. dated 03-08-2004
Reply to Office Action of 09-08-2003
Customer No. 27752

REMARKS

Claims 1 - 10 are pending in the present application. No additional claims fee is believed to be due.

Rejection Under 35 U.S.C. 132

The amendment filed 6/26/02 has been objected to under 35 U.S.C. 132 because it is asserted that such amendment introduces new matter into the disclosure, which is not supported by the original disclosure.

Therefore, the specification has further been amended on pages 14 and 15, wherein formula II and formula IV have been cancelled.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

Invention Synopsis

The present invention discloses a hair conditioning composition comprising by weight from about 0.1% to about 20% of a cationic silicone emulsion comprising by weight of the cationic silicone emulsion from about 1% to about 20% of a cationic surfactant; and an emulsifiable amount of a silicone compound having a particle size of less than about 50 microns, wherein the silicone compound comprises a mechanically emulsified polydimethylsiloxane; from about 0.1% to about 15% of a high melting point fatty compound having a melting point of 25°C or higher; from about 0.1% to about 10% of a cationic conditioning agent; and an aqueous carrier. The composition of the present invention provides increase in bulk volume while not deteriorating conditioning benefits such as fly-away control.

Rejection Under 35 USC 103(a) Over the combination of EP 460,683 ('683), WO 98/19655 ('655) and U.S. Patent 6,468,515 ('515)

Claims 1-3 and 5-10 have been rejected under 35 USC 103(a) as being unpatentable over the combination EP 460,683 ('683), WO 98/19655 ('655) and U.S. Patent 6,468,515 ('515). Applicants respectfully traverse this rejection.

In order to establish a prima facie cast of obviousness, the Examiner must show that (1) there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine

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reference teachings, (2) there is a reasonable expectation of success, and (3) all of the limitations of the claims are taught or suggested in the prior art (M.P.E.P. § 2143).

The Examiner has asserted that it would have been obvious for one of skill in the art to prepare the compositions of WO '655 and combine with the cationic silicone emulsions of EP '683 and low melting oil which can be either fatty alcohol of claim 7 or either pentaerythritol ester oils or citrate ester oils of claim 8, and polyethylene glycol of claim 9 of US '515, and expecting beneficial effect to the hair. The Examiner states that the motivation to use the low melting oil which can be either fatty alcohol of claim 7 or pentaerythritol ester oils or citrate ester oils stems from the teachings of US '515 that the compositions provide lasting moisturizing feel, smooth feel, manageability control to the hair and yet not leave the hair feeling greasy. The Examiner asserts that the motivation to use the cationic silicone emulsions wherein the silicone compound comprises a mechanically emulsified polydimethylsiloxane stems from the teaching of EP '683 that these emulsions possess high viscosity and high molecular weight. The motivation to combine the ingredients flows logically from the art for having been used in the same hair care compositions. The Examiner asserts a prima facie case of obviousness.

However, the Examiner has not provided the requisite motivation to modify the reference so as to obtain Applicants' invention. There is no recognition in any of the references, alone or combined, recognizing the need for hair conditioning compositions providing hair volume-up or an increase bulk hair volume while not deteriorating conditioning benefits. As taught and described in the Applicant's specification, the cationic conditioning agent, together with the high melting point fatty compounds, provide a unique gel network suitable for providing various conditioning benefits (p18). The Applicants have found that by the surprising combination of this gel matrix and mechanically emulsified cationic silicone emulsion, the compositions of the present invention have met the need for providing such hair volume-up or increase bulk-hair volume with no deteriorating conditioning benefits.

EP '683 is purely concentrated on a method for treating hair by applying a formulation comprising incorporating an organosilicon compound in the form of a mechanically prepared emulsion, the particle size of the organosilicon compound in the emulsion being less than about 350 nanometers. Unlike Applicants' invention, the reference does not recognize the problem for which the present invention has solved i.e. the need for hair conditioning compositions providing hair volume-up or increase bulk hair volume while not deteriorating conditioning benefits.

There is no description in EP '683 regarding the relationship between the combination of these specific materials, applied as a unique gel network in the present

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invention, and the benefit of providing a solution to the problem for which the present invention has solved i.e. providing an improved and efficacious hair care composition by combining a cationic conditioning agent, together with the high melting point fatty compounds, thus providing a unique gel network suitable for providing various conditioning benefits. The Applicants have found that by the surprising combination of this gel matrix and cationic silicone emulsion, the compositions of the present invention have meet the need for providing such hair volume-up or bulk-hair volume with no deteriorating conditioning benefits. Thus there is no motivation in the EP '683 to incorporate any type of gel matrix and arrive at the benefit of the present invention. Thus, there is no motivation in '683 to combine with either WO '655 or US '515 and arrive at such a specific gel matrix. Even further, the teachings of US '515 wherein the compositions provide lasting moisturizing feel, smooth feel, manageability control to the hair and yet not leave the hair feeling greasy, there is still no suggestion or motivation that the combination of a unique gel matrix and a mechanically emulsified cationic silicone emulsion, will result in providing a surprising benefit of increase in bulk hair volume while not deteriorating conditioning benefits.

Further, the mere teaching that EP '683 compositions may result in higher viscosity and higher molecular weight, would not translate to one of skill in the art as being used to achieve an increase bulk hair volume or volume up benefits. No where in EP '683 is it taught or suggested that increased bulk hair volume or volume up is achieved. Alternatively, EP '683 examples concentrate on methods to demonstrate combing improvements (Example XIII, XVIII, and XX). Such combing improvements would not translate to one of skill in the art to be equivalent or related to achieving an increase bulk hair volume, which has been found to be achievable by the unique combination of a gel network matrix and a mechanically emulsified cationic silicone emulsion, as taught by the present invention.

Specifically, '655 and '515 do not teach the claim limitation wherein the silicone compound comprises a mechanically emulsified polydimethylsiloxane. '515 discloses a hair conditioning composition comprising a high molecular weight ester oil being water insoluble, having a high molecular weight of at least about 800 and in liquid form at 25C. The '655 and '515 references require the use of a cationic silicone emulsion made by emulsion polymerization. On the other hand, as now amended, the present invention is directed towards a composition comprising a cationic silicone emulsion, fatty alcohol and cationic surfactants wherein the silicone compound comprises a mechanically emulsified polydimethylsiloxane. By this combination, the

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composition can provide a volume up benefit to the hair. Clearly, one of skill in the art would not be motivated to look to the teachings of either '655 or '515, based strictly on emulsion polymerization, and look to combine any of those teachings to a reference based on mechanically prepared emulsions, as taught in '683. The mechanisms and expected results are clearly different based on the emulsion preparation. EP '683 teaches that there is fundamental differences among the emulsion preparations. Further, as '655 and '515 do not recognize the relationship between volume up or an increase bulk hair volume benefits, and mechanical emulsification versus emulsion polymerization, and the benefit of the absence of anionic surfactants, again, there is no motivation to select mechanical emulsification, as taught by EP '683.

One of the advantages of using mechanical emulsification, as taught by the present invention, is that as the present composition contains a cationic surfactant, and the absence of an anionic surfactant in the silicone emulsion, results in minimizing any interaction with conditioner chassis system. The interaction of anionic surfactants in silicone emulsion, as taught and required in '655, can result in a change in composition rheology and decrease the spreadability of the composition on the hair. Further, as '655 does not recognize the relationship between volume up hair benefits, composition spreadability, absence of anionic surfactants, and mechanical emulsification versus emulsion polymerization, there is no motivation to select the present invention's mechanical emulsification and anionic free surfactant system or the mechanical emulsification as taught by EP '683, over emulsion polymerization, as taught by '655 and there is no motivation to combine the teachings of '655 with those of EP '683 or US '515.

In summary, the above remarks have established that there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings of EP '683, WO '655 or US '515 and successfully arrive at the present invention's unique and surprising benefit of volume up or increased bulk volume, while not deteriorating conditioning benefits. Applicants respectfully request reconsideration.

Conclusion

In light of the above remarks, it is requested that the Examiner reconsider and withdraw the rejection under 35 U.S.C. 132 and 103(a). Early and favorable action in the case is respectfully requested.

Applicants have made an earnest effort to place their application in proper form and to distinguish the invention as now claimed from the applied references. In view of the foregoing,

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Applicants respectfully request reconsideration of this application, entry of the amendments presented herein, and allowance of Claims 1-3, and 5-10.

Respectfully submitted,
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